

7 c. executing said next module of said sequence of modules indicated by  
8 the skip value, wherein each module of said sequence of modules  
9 comprises at least one digital signal processing data structure.

1 2. The method of claim 1 wherein the skip value comprises the integer N which  
2 indicates that execution should skip to the N+1th module following execution of a  
3 currently executed module in the first sequence of modules.

1 3. The method of claim 2 wherein a value of N less than zero associated with the  
2 currently executed module indicates that execution of the first sequence of modules  
3 should terminate after completion of execution of the currently executed module.

1 4. (Amended) The method of claim 1 further comprising executing elements a-c on a  
2 second sequence of modules, said second sequence of modules being a part of a  
3 second task.

1 5. (Cancelled)

1 6. The method of claim 1 further comprising performing a skip action created on  
2 the previous iteration of the first sequence of modules.

1 7. The method of claim 1 wherein the skip value associated with each module in  
2 said first sequence of modules may be modified by a module associated with the skip  
3 value.

1 8. The method of claim 1 wherein the skip value associated with each module in  
2 said first sequence of modules may be modified by a host associated with the first  
3 task.

1 9. A method of controlling execution flow of a first task comprising a sequence  
2 of first executable modules in a processing system by storing in each of said first  
3 executable modules a skip count, said skip count comprising an integer N which  
4 indicates that execution should skip to the N+1th module following execution of a  
5 currently executed module in the first sequence of executable modules, a value of N  
6 less than zero associated with the currently executed module indicating that execution

7 of the first sequence of modules should terminate after completion of execution of the  
8 currently executed module, wherein each module comprises at least one digital signal  
9 processing data structure.

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1 10. (Amended) A method performed by a processor of controlling the flow of  
2 execution of a first set of executable modules sequentially associated with one another  
3 comprising:  
4 a. executing a first module in said first sequence of modules;  
5 b. determining a skip value associated with said first module; and  
6 c. proceeding to execute a subsequent module in said first set of  
7 executable modules indicated by said skip value, wherein each module  
8 comprises at least one digital signal processing data structure.

A.E.

1 11. The method of claim 10 wherein the skip value comprises the integer N, and  
2 the subsequent module is the N+1th module following the first module in said first  
3 sequence of modules.

A.E.

1 12. The method of claim 11 wherein a value of N less than zero associated with  
2 said first module indicates that execution of said first sequence of modules should  
3 terminate after completion of execution of said first module.

N.E.

1 13. The method of claim 10 wherein the skip value of each module of said first  
2 sequence of modules is stored in a datum associated with said each module.

N.E.

1 14. The method of claim 10 wherein the said skip value in each of said modules  
2 may be modified by a host.

N.E.

1 15. The method of claim 10 wherein the said skip value in each of said modules  
2 may be modified by each of the respective modules in said first sequence of modules.

A.E.

1 16. An apparatus for executing a first sequence of modules in a first task, said first  
2 sequence of modules linked to one another and having at least one sequence of  
3 execution, comprising:

4 a. means for storing in each of said first sequence of modules a skip value  
5 indicating a next module in said sequence of modules to execute;

- 6 b. means for executing a first module of said first sequence of said  
7 modules; and  
8 c. means for executing said next module of said sequence of modules  
9 indicated by the skip value, wherein each module comprises at least  
10 one digital signal processing data structure.

1 17. An apparatus for controlling the flow of execution of a first set of executable  
2 modules sequentially associated with one another comprising:

- 3 a. means for executing a first module in said first sequence of modules;  
4 b. means for determining a skip value associated with said first module;  
5 and  
6 c. means for proceeding to execute a subsequent module in said first set  
7 of executable modules indicated by said skip value, wherein each  
8 module comprises at least one digital signal processing data structure.

1 18. (Amended) A method of controlling the execution sequence of a series of  
2 modules by a processor, each of said modules associated with one another,  
3 comprising:

- 4 a. executing the first in said series of modules;  
5 b. determining a skip value N stored in said first in said series of said  
6 modules;  
7 c. if the skip value N stored in said first module is less than zero, then  
8 terminating the execution of said series of modules; and  
9 d. else if the skip value N stored in said first module is greater than or  
10 equal to zero then proceeding to a N+1th module in said series of said  
11 modules, wherein each of said modules comprises at least one digital  
12 signal processing data structure.

1 19. (Amended) A method in a computer system of performing a first sequence  
2 of modules in a first task, said first sequence of modules linked to one another and  
3 having at least one sequence of execution, comprising:

- 4 a. storing in a first module of said first sequence of modules a skip value  
5 N representing a subsequent module in said first sequence of modules  
6 to execute, said skip value N comprising either:

- 7 i. an integer less than zero indicating that said first module is a  
8 last executable module to be executed in said sequence of  
9 modules; and  
10 ii. an integer greater than or equal to zero indicating that said  
11 process should proceed to said N+1th module subsequent to  
12 said first module in said first sequence of said modules;  
13 b. executing the first of said first sequence of said modules; and  
14 c. executing the subsequent module in said sequence of said modules  
15 indicated by said skip value, wherein each module of said sequence of  
16 modules comprises at least one digital signal processing data structure.

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1 ~~20.~~ (New) The method of claim 18, wherein the skip value is associated with said  
2 first in said series of said modules.

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1 ~~21.~~ (New) A machine-readable medium having executable instructions to cause a  
2 machine to control a flow of execution of a first set of executable modules  
3 sequentially associated with one another comprising:  
4 executing a first module in said first sequence of executable modules, wherein  
5 each module comprises at least one digital signal processing data structure; and  
6 executing a subsequent module in said first set of executable modules  
7 indicated by a skip value associated with a currently executing module.

58 57  
1 ~~22.~~ (New) The machine-readable medium of claim ~~21~~ further comprising:  
2 storing the skip value of each module of said first sequence of executable  
3 modules in a datum associated with each module of said first sequence of modules.

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1 ~~23.~~ (New) The machine-readable medium of claim ~~21~~ further comprising:  
2 modifying the skip value in each of said modules by a host.

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1 ~~24.~~ (New) The machine-readable medium of claim ~~21~~ further comprising:  
2 modifying the skip value in each of said modules by a module associated with  
3 the skip value.

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1 ~~25.~~ (New) The machine-readable medium of claim ~~21~~, wherein the first sequence  
2 of modules forms a first task and further comprising:

3 performing the instructions against a second sequence of modules, said second  
4 sequence of modules being part of a second task.

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1 <sup>62</sup> 26. (New) The machine-readable medium of claim <sup>57</sup> 21 further comprising:  
2 performing a skip action created on a previous iteration of the first sequence of  
3 executable modules.

1 <sup>63</sup> 27. (New) The machine-readable medium of claim <sup>57</sup> 21, wherein the skip value  
2 comprises an integer N and the subsequent module is the N+1th module following the  
3 first module in said first sequence of executable modules, and wherein a value of N  
4 less than zero associated with the currently executed module indicates that execution  
5 of said first sequence of executable modules should terminate after completion of  
6 execution of the currently executed module.